Supplementary Table. Derived actigraphy features. These features are extracted from x, y and z axes.

Feature (units)	Description
Axis amplitude proportion (AU)	The magnitude of specific axis divided by the magnitude of the vector formed by the three axes. The variable indicates which axes contribute most to the overall average vector magnitude.
Daily number of activity bouts (bouts/day)	Total, daily average number of activity bouts – defined as activity exceeding 100 counts/min for >30 seconds and ending when activity is <100 counts/min for >60 seconds
Average number of activity bouts over wear time (bouts)	The average number of bouts over wear time defined as activity exceeding 100 counts/min for >30 seconds and ending when activity is <100 counts/min for >60 seconds
Standard deviation of bouts per wear time (bouts)	The standard deviation of the number bouts per wear time. Found using the conventional standard deviation formula.
Average activity count per activity bout (count/min)	Average activity counts accumulated for each activity bout over valid wear times.
Standard deviation of activity counts per activity bout (count/min)	Standard deviation of activity counts accumulated for each activity bout over valid wear times.
Average bout length (minutes)	Average daily bout length during wear time.
Standard deviation of bout lengths (minutes)	Standard deviation of daily bout length during wear time.
Average activity counts per bout (count/min)	The average activity counts per minute per bout in a wear time. This was found by first finding all of the bouts, then finding their ACPM, then finding the average.
Activity gap length (minutes)	The average amount of time between activity bouts. This is the average amount of time being inactive (<100 counts per min) between periods of activity over wear time. This can also be interpreted as the average length of sedentary (or inactive) bouts.
Standard deviation of activity gap lengths (minutes)	The standard deviation of time between activity bouts. This is the amount of time being inactive (<100 counts per min) between periods of activity. This can also be interpreted as the standard deviation in lengths of sedentary (or inactive) bouts.
Average bout length where half of the total activity is accumulated (counts per min)	The average bout length where half of the total activity is accumulated. The lower value indicates that activity bouts were accumulated in short intervals.
Average activity count where half of the total activity is accumulated (counts per min)	The average activity count over the average bout length where half of the total activity is accumulated. The lower value indicates that activity counts were accumulated at low movement intensities.
Number of activity periods found per bout	Activity periods found per bout (defined above). An activity period is defined as an interval where counts per min exceed 100, lasting ≥3 minutes and containing >80% of non-zero values
Axis 1 average counts per min over activity periods (count/sec)	Average activity count for axis 1 during an activity period (defined above).
Axis 1 standard deviation of counts per min over activity periods (count/sec)	Standard deviation of activity counts accumulated for an activity period (defined above).

* Features are calculated for each orientation (superior-inferior, medio-lateral, anterior-posterior) and the vector magnitude for a total of 67.